

What is claimed is:

1. A substantially purified IMRRP1 polypeptide consisting of amino acid sequence SEQ ID NO: 3.
2. A substantially purified IMRRP1b polypeptide consisting of amino acid sequence SEQ ID NO: 4.
3. A substantially purified IMRRP1 polypeptide consisting of amino acid sequence SEQ ID NO: 3, wherein the amino acid sequence differs from SEQ ID NO: 3 by conservative substitutions.
4. A substantially purified IMRRP1b polypeptide consisting of amino acid sequence SEQ ID NO: 4, wherein the amino acid sequence differs from SEQ ID NO: 4 by conservative substitutions.
5. An IMRRP1 or IMRRP1b polypeptide according to claims 1 or 2 wherein the polypeptide is without native mammalian glycosylation.
- ~~6. A substantially purified fragment of the IMRRP1 polypeptide of claim 1.~~
7. A substantially purified fragment of the IMRRP1b polypeptide of claim 2.
8. A substantially purified IMRRP1 polypeptide encoded by a polynucleotide having nucleic acid sequence SEQ ID NO: 1.
9. A substantially purified IMRRP1b polypeptide encoded by a polynucleotide having nucleic acid sequence SEQ ID NO: 2.
10. A pharmaceutical composition comprising substantially purified IMRRP1 or substantially purified IMRRP1b or a fragment thereof and a pharmaceutically acceptable excipient.

11. A purified antibody which binds specifically to the polypeptide of any one of claims 1 or 2 or antigenic epitope thereof.
12. An isolated and purified polynucleotide encoding an IMRRP1 polypeptide or fragment thereof consisting of amino acid sequence SEQ ID NO: 3.
- 5 13. An isolated and purified polynucleotide encoding an IMRRP1b polypeptide or fragment thereof consisting of amino acid sequence SEQ ID NO: 4.
14. An isolated polynucleotide comprising a nucleic acid sequence having: (a) SEQ ID NO: 1, (b) a nucleic acid sequence degenerate from SEQ ID NO: 1 as a result of the genetic code, or a nucleic acid sequence complementary to either (a) or (b).
15. An isolated polynucleotide comprising a nucleic acid sequence having: (a) SEQ ID NO: 2, (b) a nucleic acid sequence degenerate from SEQ ID NO: 2 as a result of the genetic code, or a nucleic acid sequence complementary to either (a) or (b).
16. The isolated polynucleotide according to claims 14 or 15 wherein the complementary nucleic acid sequence hybridizes to either strand of a denatured, double-stranded polynucleotide comprising the nucleic acid under conditions of moderate stringency in 50% formamide and 6 X SSC, at 42 °C with washing conditions at 60 °C , 0.5 XSSC, 0.1% SDS.
17. An expression vector comprising the polynucleotide of any one of claims 12- 15.
18. An expression vector according to claim 17 that expresses a soluble IMRRP1 or a soluble IMRRP1b polypeptide.
19. A host cell containing the expression vector of claim 18.
20. A method for producing an IMRRP1 or IMRRP1b polypeptide comprising the steps of:

- (a) culturing the host cell of claim 19 under conditions suitable for the expression of the polypeptide; and
- (b) recovering the polypeptide from the host cell culture.

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21. A hybridization probe or primer comprising an oligonucleotide or polynucleotide of a sequence capable of hybridizing with a polynucleotide of SEQ ID NO: 1 or 2 under moderate to high stringency conditions characterized in that the sequence comprises 10 or more contiguous bases.
22. A hybridization probe or primer of claim 21 characterized in that it is capable of hybridizing with a polynucleotide of SEQ ID NO: 1 or 2 under high stringency conditions.
23. A method for detecting a polynucleotide encoding an IMRRP1 or IMRRP1b polypeptide or fragment thereof in a biological sample containing nucleic acid material, the method comprising the steps of:
- (a) hybridizing the oligonucleotide of claim 21 or 22 to the nucleic acid material of the biological sample, thereby forming a hybridization complex; and
  - (b) detecting the hybridization complex, wherein the presence of the complex correlates with the presence of the polynucleotide encoding the IMRRP1 or IMRRP1b polypeptides or fragment thereof in the biological sample.
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24. The method of claim 23, wherein the nucleic acid material of the biological sample is amplified by the polymerase chain reaction before the hybridizing step.
25. A method for detecting IMRRP1 or IMRRP1b polypeptides or antigenic fragments thereof in a sample, comprising:
- (a) contacting the sample with an antibody specific for IMRRP1 or IMRRP1b polypeptides or antigenic fragment thereof under

conditions in which an antigen-antibody complex can form between the antibody and the IMRRP1 or IMRRP1b polypeptides or antigenic fragment thereof in the sample; and

(b) detecting an antigen-antibody complex formed in step (a),

wherein detection of the complex indicates the presence of the

IMRRP1 or IMRRP1b polypeptides or antigenic fragments thereof in the sample.

26. A method of identifying candidate ligands which bind to an IMRRP1 or IMRRP1b polypeptide comprising:

(a) contacting a test compound with IMRRP1 or IMRRP1b polypeptide or ligand binding portion thereof,

(b) selecting as candidate ligands those test compounds which bind to IMRRP1 or IMRRP1b or ligand binding portion thereof.

27. The method according to claim 26, wherein IMRRP1 or IMRRP1b is soluble, bound to a substrate, or cell membrane associated.

28. The method according to claim 26, wherein the method is a competitive inhibition assay.

29. The method according to claim 26, wherein said binding is detected using an antibody.